

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

690 Walnut Ave. St. 150

Vallejo, CA 94592-1133

(707) 649-5453

(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017896**Date Inspected:** 03-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1000**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1830**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Jobsite**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** SAS OBG**Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance Inspector (QAI) Bert Madison was present at Yerba Buena Island in California between the times noted above for observations relative to the work being performed by American Bridge/Fluor Enterprises (AB/F) personnel at the locations noted below.

- 1). OBG Field Welding of East Line Lifting Rod Access Penetration Insert (SMAW)
- 2). OBG Field Splice of Ventilation Access Insert Weld at 5E-PP29.5-E2-S – (SMAW)
- 3). OBG Field Splice of Ventilation Access Insert Weld at 3E-PP23.5-E5-NE – (SMAW)
- 4). OBG Field Splice 7W/8W Weld ID: A2 & A5, Face A – (SMAW R-2 Repairs)

- 1). OBG Field Welding of East Line Lifting Rod Access Penetration Insert (SMAW)

Interior: OBG 2E-PP15-E4-welds 1, 3 & 4

The QAI periodically observed the welding per the Shielded Metal Arc Welding (SMAW) process in the 4G (overhead) position to restore the Lifting Rod Access Penetrations in the A deck at PP15. The QAI observed that AB/F approved welder Darcell Jackson (ID 9967) performed back grinding and subsequent back welding at PP15 weld E4-4, E4—1 and E4-3. QC Inspector John Pagliero was periodically present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1110B rev 1. See photo below. The QAI periodically observed QC Inspector John Pagliero performing Magnetic Particle Testing (MT) of the back grind area prior to back welding at this location. The QAI observed that the performance and evaluation of the MT appeared to comply with the MT procedure identified as SE-MT-CT-D1.5-101 Rev. 4. Welding was completed from the interior at E4-4 and in process at E4-1 and E4-3 and the QAI observed that the work appeared to be in general compliance with contract documents.

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Interior: OBG 1E-PP8.5-E4-weld 1

The QAI periodically observed AB/F approved welder Rick Clayborn (ID 2773) performing air carbon arc gouging to excavate one UT rejectable indication from the bottom surface of OBG 1E-PP8.5-E4-weld 1.

Exterior: OBG 4E-PP27- E4-welds 3 & 4

The QAI periodically observed welding per the Shielded Metal Arc Welding (SMAW) process in the 1G (flat) position to restore the Lifting Rod Access Penetration in the A deck at PP27. The QAI observed that AB/F approved welder Melvin Ivy (ID 8309) performed fill and cover passes at 4E PP27 weld E4-4, and fit-up, tack welding, root and fill passes at 4E PP27 weld E4-3. QC Inspector Patrick Swain was present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1070. The QAI observed that the work at this location appeared to be in general compliance with contract documents.

2). OBG Field Splice of Ventilation Access Insert Weld at 5E-PP29.5-E2-S – (SMAW)

The QAI periodically observed the welding per the Shielded Metal Arc Welding (SMAW) process in the 1G (flat) position to restore the Ventilation Access Insert at 5E-PP29.5-E2-S. The QAI observed that AB/F approved welder Jin Pei Wang (ID 7299) performed welding from the exterior of the OBG at this location. QC Inspector Patrick Swain was periodically present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1010 rev 1. The QAI observed that welding of fill passes was in process and the work at this location appeared to be in general compliance with contract documents.

3). OBG Field Splice of Ventilation Access Insert Weld at 3E-PP23.5-E5-NE – (SMAW)

The QAI periodically observed the welding per the Shielded Metal Arc Welding (SMAW) process in the 4G (overhead) position to restore the Ventilation Access Insert at 3E-PP23.5-E5-NE. The QAI observed that AB/F approved welder James Zhen (ID 6001) performed back welding from the interior of the OBG (to serve as backing for the welding from the exterior of the OBG) at this location. QC Inspector John Pagliero was periodically present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1010 rev 1. Welding was in process at this location and the QAI observed that the work appeared to be in general compliance with contract documents.

4). OBG Field Splice 7W/8W Weld ID: A2 & A5, Face A – (SMAW R-2 Repairs)

The QAI periodically observed AB/F approved welder Fred Kaddu (ID 2188) performing grinding to excavate R-2 repair locations and subsequently performing welding per the Shielded Metal Arc Welding (SMAW) process in the 1G (flat) position of OBG Field Splice 7W/8W Weld ID: A2 & A5 at R-2 Ultrasonic Testing (UT) rejectable areas. See photo below. QC Inspector Steve McConnell was present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1000 Repair. Mr. McConnell also performed Magnetic Particle Testing (MT) of the excavated areas prior to the repair welding. The QAI observed that the performance and evaluation of the MT appeared to comply with the MT procedure identified as SE-MT-CT-D1.5-101 Rev. 4. The QAI observed that Mr. Kaddu completed welding of (2) two excavations with the following dimensions at the following Y locations: Weld A2 - Y = 3125mm, Length = 90mm, Depth = 14mm and Width = 25mm and Weld A2 - Y = 3295mm, Length = 85mm, Depth = 14mm and Width = 25mm. The QAI also periodically observed Mr. Kaddu welding fill passes in an excavated area located at A2 – Y = 4900mm, Length = 290mm and Depth = 17mm and Width = 25mm. The work at this location was in process. The QAI also observed a R-2 repair excavation located at A5- Y = 4350mm, Length = 100mm, Depth = 16mm and Width = 25mm. The QAI observed that work at these locations appeared to be in general compliance with contract documents.

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Summary of Conversations:

Conversations on this date with Quality Control Inspectors were general in nature and pertained to locations of welding and QC activities.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammed Fatemi (916) 813 3677, who represents the Office of Structural Materials for your project.

Inspected By:	Madison,Bert
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Quality Assurance Inspector

Reviewed By:	Levell,Bill
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QA Reviewer
